# Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics Service | 1435 Win Hentschel Blvd. Suite B105 | West Lafayette, IN 47906-4145 (765) 494-8371

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## CROP REPORT FOR WEEK ENDING MAY 16

### AGRICULTURAL SUMMARY

Showers slowed field activity for many farmers while others worked around the precipitation during the week, according to the Indiana Agricultural Statistics Service. The rain spurred growth and development of major crops. Stands of emerged corn look good. Most farmers have now finished planting of their corn acreage. Soybean planting made good progress last week. Soybean planting is one week behind the record pace established in 2001, but is 10 days ahead of the average pace. First cutting of hay crops continued, mostly in the southern regions.

### FIELD CROPS REPORT

There were 4.1 **days suitable for fieldwork**. Ninety-three percent of the intended **corn** acreage is planted compared with 60 percent for last year and 70 percent for the 5-year average. Seventy-one percent of the corn acreage has **emerged** compared with 41 percent last year and 45 percent for the average. By area, 94 percent of the corn is planted in the north, 96 percent in the central region and 86 percent in the south. Sixty-six percent of the intended **soybean** acreage is planted compared with 24 percent last year and 46 percent for the average. By area, 71 percent of the soybean acreage is planted in the north, 74 percent in the central region and 42 percent in the south.

Virtually all of the **winter wheat** acreage is now **jointed**. Sixty-five percent of the winter wheat is **headed** compared with 54 percent last year and 57 percent for the average. Winter wheat **condition** is rated 84 percent good to excellent compared with 82 percent last year at this time. Setting of **tobacco** plants is 6 percent complete.

Major activities during the week were tillage of soils, applying anhydrous ammonia, spreading fertilizer, spraying herbicides, repairing equipment, moving grain to market, hauling manure and taking care of livestock.

### LIVESTOCK, PASTURE AND RANGE REPORT

**Pasture condition** is rated 13 percent excellent, 66 percent good, 18 percent fair and 3 percent poor. Livestock are in mostly good condition. Spring calving is nearing completion on some farms.

### CROP PROGRESS TABLE

| Crop | This Week | Last Week | Last Year | 5-Year Avg |
|---|---|---|---|---|
| | Percent | | | |
| Corn Planted | 93 | 87 | 60 | 70 |
| Corn Emerged | 71 | 44 | 41 | 45 |
| Soybeans Planted | 66 | 48 | 24 | 46 |
| Soybeans Emerged | 31 | NA | 9 | 20 |
| Winter Wheat Headed | 65 | 29 | 54 | 57 |
| Tobacco Plants Set | 6 | 1 | 3 | 6 |

### CROP CONDITION TABLE

| Crop | Very Poor | Poor | Fair | Good | Excel-lent |
|---|---|---|---|---|---|
| | | | Percent | | |
| Pasture | 0 | 3 | 18 | 66 | 13 |
| Winter Wheat 2004 | 0 | 2 | 14 | 65 | 19 |
| Winter Wheat 2003 | 1 | 2 | 15 | 56 | 26 |

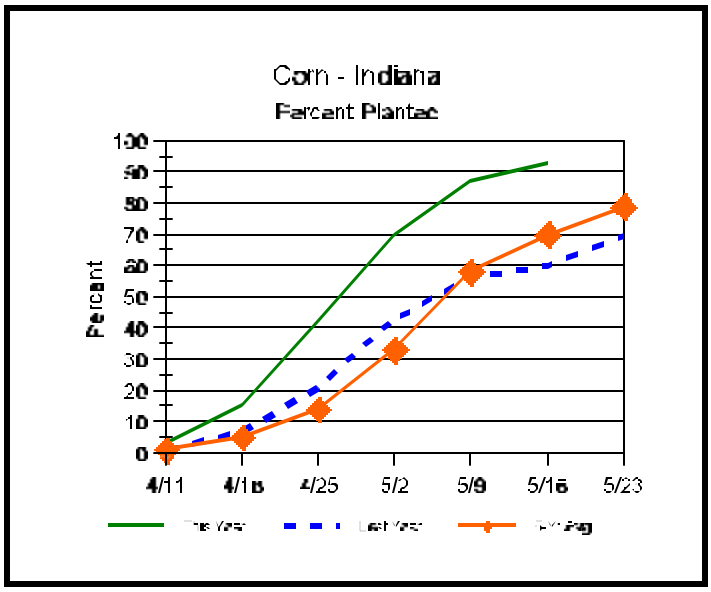
### SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

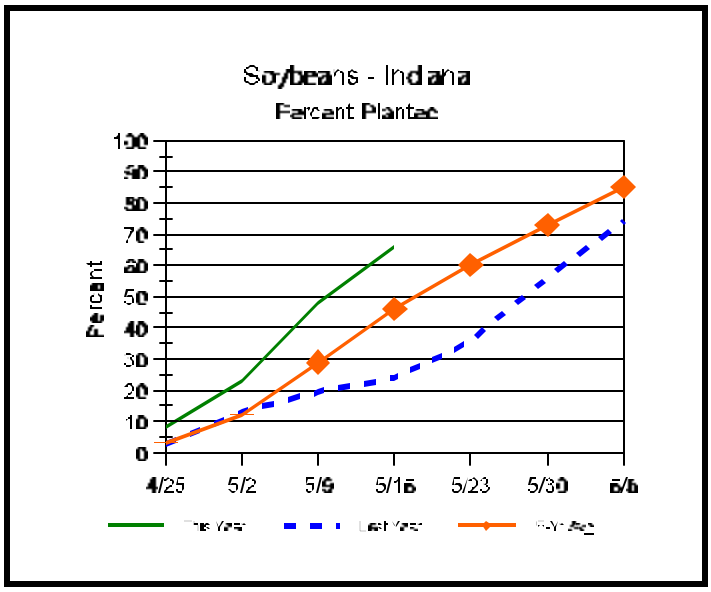
| | This Week | Last Week | Last Year |
|---|---|---|---|
| | | Percent | |
| **Topsoil** | | | |
| Very Short | 1 | 3 | 0 |
| Short | 8 | 14 | 0 |
| Adequate | 73 | 71 | 31 |
| Surplus | 18 | 12 | 69 |
| **Subsoil** | | | |
| Very Short | 3 | 4 | 0 |
| Short | 15 | 17 | 4 |
| Adequate | 73 | 71 | 50 |
| Surplus | 9 | 8 | 46 |
| **Days Suitable** | 4.1 | 4.6 | 1.0 |


### CONTACT INFORMATION

--Greg Preston, State Director
--Bud Bever, Agricultural Statistician
E-Mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/in/index.htm

# Crop Progress




## Other Agricultural Comments And News

### Growing Points of Interest

- Recovery from early season damage to corn is often dependent on the health of growing point region.

There is something about 30 mph winds and sand/grit/soil blasting across corn fields at seedling height that makes one curious about the ability of corn to recover from early season damage. The same can be said following a thunderstorm accompanied by strong winds and damaging hail. Whenever corn is damaged early in the growing season, growers are sometimes faced with the decision of whether or not to replant the field.

One of the most important, and most difficult, steps in making a replant decision is estimating the surviving plant population in the field. Corn is remarkably resilient to above ground damage early in the season, yet growers often underestimate the ability of corn to recover from such damage. Consequently, much of the replanting that occurs each year is a waste of money and effort. Use the worksheet in my replant publication (AY-264-W) to estimate yield and dollar returns to corn replanting.

The health and condition of the corn plant's growing point (apical meristem) plays a major role in determining whether a damaged corn plant will recover or not. A plant damaged above ground but with a healthy, undamaged growing point will usually survive. However, damage to the growing point area will either kill the plant or severely stunt its recovery.

The growing point is that meristematic area of the corn plant where leaves and, eventually, the tassel are initiated. Morphologically, the growing point area is located at the top of the young plant's stalk tissue. Prior to stalk internode elongation, the growing point is initially located 1/4 to 3/4 inch below the soil surface, near the crown of young seedlings at growth stages VE (emergence) to about V4 (four leaves with visible leaf collars).

The growing point remains below ground until V5 to V6. Stalk internodes begin to elongate shortly before V5, eventually elevating the growing point above the soil surface. From this point forward, the growing point becomes increasingly exposed and vulnerable to above ground damage.

Prior to V6, while the growing point is below ground, corn can tolerate quite a bit of above ground injury from "single event" damage by frost, hail, wind, cutworm feeding, sandblasting, tire traffic, 28% N solution burn, etc. However, repeated injury to young plants (e.g., multiple days of sandblasting) or extended periods of sub-optimal temperatures (i.e., "darned" cold weather) and cloudy conditions following the damage may prevent photosynthetic recovery (renewal of green leaves) long enough to eventually kill the plant even though the growing point is technically not injured.

While corn younger than V6 can tolerate a fair amount of above ground frost damage to exposed leaf tissue, lethal cold temperatures (28 °F or less for several

(Continued on Page 4)

# Weather Information Table

## Week ending Sunday May 16, 2004

| Station | Past Week Weather Summary Data | | | | | | | Accumulation April 1, 2004 thru May 16, 2004 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Air Temperature | | | | Precip. | | Avg 4 in Soil | Precipitation | | | GDD Base 50°F | |
| | Hi | Lo | Avg | DFN | Total | Days | Temp | Total | DFN | Days | Total | DFN |
| **Northwest (1)** | | | | | | | | | | | | |
| Chalmers_5W | 87 | 42 | 69 | +8 | 1.47 | 5 | 65 | 4.07 | -1.66 | 12 | 355 | +67 |
| Valparaiso_AP_I | 88 | 40 | 67 | +9 | 2.41 | 5 | | 4.19 | -1.75 | 13 | 348 | +121 |
| Wanatah | 86 | 37 | 66 | +9 | 2.51 | 6 | 69 | 4.27 | -1.42 | 15 | 309 | +118 |
| Wheatfield | 89 | 41 | 68 | +10 | 2.32 | 5 | | 8.26 | +2.71 | 24 | 333 | +125 |
| Winamac | 86 | 40 | 68 | +9 | 1.27 | 5 | | 4.42 | -1.05 | 17 | 349 | +105 |
| **North Central(2)** | | | | | | | | | | | | |
| Plymouth | 85 | 43 | 68 | +8 | 2.61 | 5 | | 5.21 | -0.61 | 16 | 322 | +63 |
| South_Bend | 88 | 42 | 69 | +11 | 1.75 | 6 | | 3.10 | -2.34 | 16 | 382 | +171 |
| Young_America | 88 | 43 | 69 | +10 | 1.07 | 5 | | 3.21 | -2.19 | 12 | 382 | +144 |
| **Northeast (3)** | | | | | | | | | | | | |
| Columbia_City | 85 | 40 | 68 | +11 | 0.64 | 5 | | 3.78 | -1.61 | 17 | 323 | +131 |
| Fort_Wayne | 84 | 49 | 69 | +10 | 0.42 | 4 | | 3.57 | -1.57 | 15 | 362 | +138 |
| **West Central (4)** | | | | | | | | | | | | |
| Greencastle | 85 | 51 | 68 | +6 | 2.31 | 5 | | 3.96 | -2.24 | 16 | 363 | +42 |
| Perrysville | 88 | 50 | 70 | +10 | 2.07 | 4 | 70 | 4.88 | -1.08 | 12 | 435 | +159 |
| Spencer_Ag | 85 | 51 | 69 | +8 | 1.86 | 4 | | 5.29 | -1.24 | 18 | 388 | +108 |
| Terre_Haute_AFB | 86 | 53 | 70 | +9 | 0.71 | 3 | | 2.55 | -3.73 | 11 | 465 | +146 |
| W_Lafayette_6NW | 88 | 42 | 69 | +10 | 1.19 | 4 | 73 | 3.63 | -2.18 | 11 | 400 | +156 |
| **Central (5)** | | | | | | | | | | | | |
| Eagle_Creek_AP | 83 | 51 | 68 | +7 | 0.84 | 4 | | 2.92 | -2.86 | 14 | 418 | +110 |
| Greenfield | 84 | 48 | 68 | +7 | 1.14 | 3 | | 3.32 | -3.02 | 16 | 373 | +101 |
| Indianapolis_AP | 85 | 52 | 69 | +8 | 1.30 | 4 | | 3.57 | -2.21 | 15 | 453 | +145 |
| Indianapolis_SE | 84 | 49 | 68 | +7 | 0.99 | 3 | | 3.50 | -2.65 | 14 | 396 | +106 |
| Tipton_Ag | 85 | 49 | 68 | +10 | 0.42 | 3 | | 2.83 | -3.09 | 13 | 348 | +134 |
| **East Central (6)** | | | | | | | | | | | | |
| Farmland | 85 | 48 | 68 | +10 | 0.92 | 3 | | 4.08 | -1.42 | 17 | 348 | +142 |
| New_Castle | 83 | 47 | 66 | +7 | 0.87 | 3 | | 3.61 | -2.80 | 15 | 286 | +74 |
| **Southwest (7)** | | | | | | | | | | | | |
| Evansville | 85 | 54 | 71 | +7 | 2.00 | 4 | | 5.64 | -0.90 | 16 | 551 | +118 |
| Freelandville | 84 | 52 | 69 | +7 | 1.50 | 4 | | 3.74 | -2.79 | 16 | 460 | +119 |
| Shoals | 85 | 54 | 70 | +8 | 1.67 | 4 | | 5.92 | -0.94 | 21 | 464 | +133 |
| Stendal | 85 | 54 | 70 | +7 | 2.15 | 4 | | 5.21 | -1.94 | 14 | 513 | +131 |
| Vincennes_5NE | 87 | 52 | 70 | +8 | 1.49 | 4 | 67 | 4.88 | -1.65 | 18 | 504 | +163 |
| **South Central(8)** | | | | | | | | | | | | |
| Leavenworth | 85 | 54 | 69 | +8 | 1.64 | 4 | | 7.89 | +0.78 | 18 | 457 | +119 |
| Oolitic | 83 | 53 | 68 | +7 | 1.18 | 4 | | 5.52 | -0.99 | 20 | 402 | +105 |
| Tell_City | 86 | 55 | 71 | +8 | 1.43 | 5 | | 7.84 | +0.48 | 19 | 557 | +160 |
| **Southeast (9)** | | | | | | | | | | | | |
| Brookville | 87 | 53 | 69 | +9 | 0.60 | 3 | | 5.30 | -1.01 | 17 | 373 | +123 |
| Milan_5NE | 85 | 52 | 69 | +10 | 1.12 | 5 | | 6.18 | -0.13 | 23 | 393 | +143 |
| Scottsburg | 85 | 55 | 69 | +7 | 1.41 | 4 | | 7.98 | +1.44 | 21 | 440 | +95 |

DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.



The above weather information is provided by AWIS, Inc.
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www.awis.com or call toll free at 1-888-798-9955.

hours) can "penetrate" the upper soil surface (especially dry soils) and damage or kill the growing point of a young corn plant. Corn younger than V6 is also susceptible to below ground damage from soil insects, disease, and flooding or ponding.

Human nature being what it is, most growers can't avoid walking damaged corn fields the day of or the day following the injury to begin assessing the consequences of damage to their corn field. Unfortunately, most of the time a fair assessment of the recovery potential of damaged plants cannot be made that soon. Damaged corn fields need to be left alone for several days, sometimes up to a week, after the damage occurs to give the plants some time to exhibit visible recovery.

Splitting open a damaged corn plant is a time-honored practice when assessing the consequences of early-season damage to corn. The stalk tissue near the growing point region should remain firm and yellowish-white, as should the growing point region itself. Discolored or mushy tissue near the growing point usually spells trouble for the injured plant. Injury that occurs close to the growing point area (e.g., hail damage, stinkbug feeding) may alter normal hormonal activity and eventually cause deformed regrowth of stalk or leaf tissue.

Visible recovery of leaf development from the whorl of surviving plants will be evident within 3 to 10 days after a damage event, depending on temperature and soil moisture conditions. Warmer temperatures and adequate soil moisture encourage rapid recovery, while cooler temperatures and/or drought stress slow the rate of recovery. Given sufficient time, surviving corn plants will exhibit new leaf tissue expanding from the whorls, while dead corn plants will still look, well… dead.

Select References:

Nielsen, R.L. (Bob). 2003 (rev.) Estimating Yield and Dollar Returns to Corn Replanting. Purdue Univ. Coop. Ext. Service Pub. No. AY-264-W. Available on the Web at http://www.agry.purdue.edu/ext/pubs/AY-264-W.pdf. (Verified 5/4/04).

Don't forget, this and other timely information about corn can be viewed at the Chat 'n Chew Café on the Web at http://www.kingcorn.org/cafe. For other information about corn, take a look at the Corn Growers' Guidebook on the Web at http://www.kingcorn.org. 

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